No. 17-1229

IN THE

Supreme Court of the United States

HELSINN HEALTHCARE S.A.,

Petitioner,

v.

TEVA PHARMACEUTICALS USA, INC., ET AL.,

Respondents.

ON WRIT OF CERTIORARI
TO THE UNITED STATES COURT OF APPEALS
FOR THE FEDERAL CIRCUIT

BRIEF OF THE R STREET INSTITUTE AND ENGINE ADVOCACY AS *AMICI CURIAE* IN SUPPORT OF RESPONDENTS

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INTEREST OF *AMICI CURIAE*

The R Street Institute[1] is a non-profit, non-partisan public-policy research organization. R Street's mission is to engage in policy research and educational outreach that promotes free markets as well as limited yet effective government, including properly calibrated legal and regulatory frameworks that support economic growth and individual liberty.

Engine Advocacy is a non-profit technology policy, research, and advocacy organization that bridges the gap between policymakers and startups, working with government and a community of high-technology, growth-oriented startups across the nation to support the development of technology entrepreneurship. Engine conducts research, organizes events, and spearheads campaigns to educate elected officials, the entrepreneur community, and the general public on issues vital to fostering technological innovation. Part of amplifying startup concerns includes highlighting the unique challenges small startups face when confronted with abusive, and typically opaque, patent litigation.

[1]Pursuant to Supreme Court Rule 37.3(a), all parties received appropriate notice of and consented to the filing of this brief. Pursuant to Rule 37.6, no counsel for a party authored this brief in whole or in part, and no counsel or party made a monetary contribution intended to fund the preparation or submission of the brief. No person or entity, other than *amici*, their members, or their counsel, made a monetary contribution to the preparation or submission of this brief.

SUMMARY OF ARGUMENT

Under 35 U.S.C. § 102, an inventor may not obtain a patent on an invention that has been "on sale" for more than a year. The question is whether, from this so-called on-sale bar, certain classes of sales should be exempted—sales under a confidentiality agreement, in Petitioner's view; and sales to those other than the ultimate customers, according to the government.

Neither class of sales should be exempted from the scope of § 102. To do so would open up an easily exploitable loophole in the on-sale bar that would undermine both patent law and the public welfare. Additionally, § 102 is best interpreted as consistent with basic property ownership principles, which dictate that all sales should be treated alike in view of the right to resell. For at least these reasons, the Court of Appeals should be affirmed.

1. Petitioner's theory that "secret sales" are outside the scope of § 102 is flawed because it would enable any inventor to circumvent the on-sale bar. The theory rests solely on a standard nondisclosure agreement between Petitioner and its buyer. Other inventors could attach the same sort of nondisclosure agreement to every sale of their inventions to avoid triggering the on-sale bar, allowing at least some inventors to delay filing their patent applications, potentially for years. Petitioner and some *amici* are incorrect in believing that the first-inventor-to-file system will mitigate this incentive for delay at least because, as this brief presents, there is a cheap and effective strategy for delaying filing as long as possible while still ensuring a position of being first to file.

There are at least two negative ramifications of widespread use of nondisclosure agreements to delay

patent filings. First, that strategy frustrates several basic premises of the patent system, in particular the time-limited patent term and the disclosure function of patents. Second, overuse of nondisclosure agreements ought not to be encouraged because it can impair other societally important work, such as research to discover safety or security concerns in consumer products. Interpreting § 102 so that it cannot be circumvented with nondisclosure agreements would avoid both of these problems.

2. Petitioner's and the government's theories of the case are also incorrect because they conflict with the principle against restraints on alienation. Because property may be resold freely, the act of placing an invention on sale inherently makes the invention available to the public: The inventor must accept that the invented product has entered the stream of commerce and now may reach any willing buyer. The inventor may contractually discourage resale and recover damages for breach, but has no power to prevent resale.

Neither Petitioner's nor the government's theory of the case is reconcilable with the inherently public nature of property sales. Both assume that an inventor can put an invention on sale and yet be unwilling to let some parties buy it—those outside the confidentiality agreement in Petitioner's view, and "ultimate customers" according to the government. As a result, neither theory is consistent with the notion that the buyer of a chattel is free to alienate it at will to any member of the public.

There are at least two reasons why it would be unwise to interpret § 102 as inconsistent with this traditional view of property rights. First, it is difficult to believe that a patent-specific understanding of sale is superior to common law property rules tested over centuries, especially

given that the on-sale bar has long been consistent with the freedom to alienate property. Second, as this Court reasoned in *Impression Products, Inc. v. Lexmark International, Inc.*, 137 S. Ct. 1523 (2017), statutory patent law ought to yield to property rights, especially at the point of sales. To conclude otherwise would wrongly allow for the Patent Act to intrude upon the statutory domain of property and commercial law.

The above considerations militate in favor of affirmance, but they also point to the larger significance of this case, which might otherwise appear to be no more than a squabble over the textual interpretation of a few words in § 102. Questions of whether inventors should enjoy an end-run around patent term limits and the disclosure requirement and whether intellectual property should displace physical property—these are questions that strike at the heart of the patent laws. This is an important case meriting scrutiny of all its implications, myriad and perhaps unexpected.

ARGUMENT

I. PETITIONER'S INTERPRETATION OF § 102 WILL HAVE HARMFUL CONSEQUENCES FOR THE PATENT SYSTEM AND PUBLIC WELFARE

It would be dangerous to agree with Petitioner's view that an inventor may place an invention on sale[2] without triggering the on-sale bar of 35 U.S.C. § 102(a)(1) merely by attaching a nondisclosure agreement to the sale. Should that view become the law of the land, inventors will almost certainly avail themselves of the opportunity to slap boilerplate nondisclosure agreements onto every product they sell, thereby allowing them to delay their patent filings and to enjoy an effectively extended patent term. That result would fundamentally undermine basic principles of patent law, and it would have the unexpected negative consequence of blocking valuable public safety and security research. These consequences are reason to disfavor Petitioner's interpretation of § 102.

A. EXEMPTING SECRET SALES FROM THE ON-SALE BAR WILL LEAD TO WIDESPREAD, INDISCRIMINATE USE OF NONDISCLOSURE AGREEMENTS

If Petitioner is correct that a nondisclosure agreement overcomes the on-sale bar, it is likely that such agreements will proliferate across all sales of products. Petitioner's nondisclosure agreement, which supposedly

[2] As a technical matter, it is not the "invention" being sold, but rather devices or goods that embody the invention. Nevertheless, for purposes of brevity and consistency with the statutory language, this brief uses the term "invention" as shorthand for "embodiment of the invention" where the context requires.

overcomes the on-sale bar, is nothing more than a standard form contract that others could easily replicate. *See* J.A. 107–09. And at least some courts have been willing to enforce the ubiquitous "shrink-wrap agreements" that prohibit study of products to reveal their internal workings. *See, e.g., Davidson & Assocs. v. Jung*, 422 F.3d 630, 639 (8th Cir. 2005); *Bowers v. Baystate Techs., Inc.*, 320 F.3d 1317, 1326 (Fed. Cir. 2003).[3]

The massive potential upside of this strategy is an extended patent term. Because a patent's term depends on "the date on which the application for the patent was filed," 35 U.S.C. § 154(a)(2), each day that the inventor can delay filing is an extra day of patent term. Those extra days can be significant. A single day on a pharmaceutical patent is worth $34 million for adalimumab (Humira, for rheumatoid arthritis)[4] and $24 million for ledipasvir/sofosbuvir (Harvoni, for hepatitis C),[5] for example. And in the software industry, opportunistic patent assertion entities often file their lawsuits "late in the patent term, precisely when litigation seems most

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[3]There are some cases "in conflict on the enforceability of anti-reverse-engineering clauses," although those predate *Davidson* and *Bowers*. Pamela Samuelson & Suzanne Scotchmer, *The Law and Economics of Reverse Engineering*, 111 Yale L.J. 1575, 1626 (2002).

[4]*See* AbbVie Inc., Annual Report (Form 10-K), at 38 tbl. (Feb. 16, 2018); Initiative for Meds., Access & Knowledge, *Overpatented, Overpriced: Special Humira Edition* 6 (Sept. 2018), *available online*. Locations of authorities available online are shown in the Table of Authorities.

[5]*See* Gilead Scis., Inc., Annual Report (Form 10-K), at 50, 52 (Feb. 24, 2016) (computed based on $10.1 billion in U.S. sales and 88% product gross margin). Sales of Harvoni have decreased since then due to competing drugs and fewer patients requiring treatment. *See* Deena Beasley, *Gilead Profit Falls as Hepatitis C Sales Drop, Shares Down*, Reuters (May 2, 2017), *available online*.

abusive." Brian J. Love, *An Empirical Study of Patent Litigation Timing: Could a Patent Term Reduction Decimate Trolls Without Harming Innovators?*, 161 U. Pa. L. Rev. 1309, 1340–41 & tbl.7 (2013) (finding that non-practicing entities account for 61.2% of patent assertions within three years of patent expiry). Extra days of patent term can embolden this strategy.

If nondisclosure agreements allow inventors to sell their inventions without triggering the on-sale bar,[6] then inventors will not hesitate to sell their inventions for as long as possible until competition arrives, and only then seek patent protection. In many cases, this competition will be slow to arrive. The original inventor will naturally enjoy "the transient advantage inherent in being a first mover." *See Geneva Pharm. Tech. Corp. v. Barr Labs. Inc.*, 386 F.3d 485, 501 (2d Cir. 2004); Marvin B. Lieberman & David B. Montgomery, *First-Mover Advantages*, 9 Strategic Mgmt. J. 41, 42–47 (Summer 1988). And, as Judge Easterbrook explained, competitors would not want to sink costs into producing alternate products only to have the original inventor subsequently obtain a patent: "Fear of losing their investment may discourage rivals and enable the inventor to collect supra-competitive profits before obtaining a patent." *In re Mahurkar Double Lumen Hemodialysis Catheter Patent Litig.*, 831 F. Supp. 1354, 1369 (N.D. Ill. 1993) (Easterbrook, J., sitting by designation), *aff'd*, 71 F.3d 1573 (Fed. Cir. 1995).

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[6]This strategy may not seem amenable to simpler inventions that are harder to conceal even with a nondisclosure agreement. But inventors have a variety of techniques for concealing their inventions to render nondisclosure agreements effective. *See, e.g.*, S.R. Subramanya & Byung K. Yi, *Digital Rights Management*, IEEE Potentials, Mar.–Apr. 2006, at 31 (describing one class of such techniques).

Petitioner's theory of the case thus lays out a roadmap for any inventor to collect monopoly royalties for a period in excess of the statutory patent term: Sell the invention under boilerplate nondisclosure agreements, thereby avoiding the on-sale bar of § 102, and then file for patent protection as late as possible. It is difficult to believe that any inventor would not use this strategy to the fullest practicable extent.

B. Other Aspects of Patent Law Will Not Mitigate Incentives to Delay Patent Application Filing

Petitioner and several *amici* hypothesize that inventors will nevertheless file their patent applications early because of the new first-inventor-to-file rules, but there are several reasons to discount this hypothesis.

Prior to 2011, the United States followed a first-to-invent system by which the first inventor to arrive at an invention merited a patent, regardless of whether that inventor filed for patent protection before or after other competing inventors. *See* § 102(g) (2011). The America Invents Act changed that rule, awarding patent protection to the first to file a patent application, so long as that first filer arrived at the invention independently of other inventors. *See* 35 U.S.C. § 102(a)(2), (b)(2)(a).

Although the possibility of being displaced by a second comer is undoubtedly some incentive to file early under the first-inventor-to-file system, it is unlikely that this incentive will be sufficient to encourage all inventors to file early. Respondent Teva's brief (at 49–50) lays out several reasons for this conclusion, and another is worth mentioning.

To obtain as long a patent term as possible while also thwarting second inventors, an inventor need only file multiple repeated patent applications in secret[7] and then abandon them, retaining only the last one that predates any subsequent independent inventors. Taking the present case as an example, Helsinn could have filed a patent application on its invented drug in 2001 (when it first sold its invention to MGA), a duplicate of that application in 2002, another in 2003, another in 2004, and so on. If another company applied for a patent on the same drug in 2009, for example, Helsinn would then abandon all of these applications except for the one filed in 2008—just early enough to defeat the independent company's claim to patent priority but late enough to add seven years to the patent term.[8]

The aforementioned scheme is not especially costly—$1720 per application in fees, about the cost of printing two Supreme Court briefs. *See* 37 C.F.R. § 1.16(a), (k), (o). And practitioners already recommend that inventors file multiple rounds of applications as they improve their inventions.[9] It would require little effort for inven-

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[7] A patent application can be filed in secret under 35 U.S.C. § 122(b)(2)(B)(i). Doing so prevents the earlier applications from being prior art to the later ones. Also, the later applications would not claim priority to the earlier ones under 35 U.S.C. § 120, as doing so would cut off the later applications' patent term under § 154(a)(2).

[8] The above strategy presents several implementation problems, such as the timing of abandonments in view of the 18-month delay in publication of the independent company's applications, *see* § 122(b)(1)(A), and delaying examination during the waiting period. Patent attorneys will undoubtedly find solutions to these problems.

[9] *See, e.g.*, Kirk Cesari, *Filing Multiple Provisional Patents Per Non-Provisional*, Cesari-Reed (Feb. 6, 2016), *available online* (recommending filing multiple provisional patent applications "due to the first-to-file system the US now has"); Charles E. Van Horn, *Prac-*

tors to combine their existing multiple-application strategies with another strategy of selective abandonment,[10] thereby allowing those inventors to tack as much extra time as possible onto their patent term.

C. Use of Nondisclosure Agreements to Delay Patent Filings Will Thwart the Basic Aims of the Patent System

Proliferation of nondisclosure agreements that circumvent the on-sale bar would be devastating to fundamental principles of the patent system, in particular the limited duration requirement and the public disclosure function of patents.

The on-sale bar effectuates the basic principle that a patent is limited in duration. That patents are granted only "for limited Times" is a premise so fundamental that it is written into the constitutional authorization for patent grants. U.S. Const. art. I, § 8, cl. 8. But delayed filing at the front end equates to later expiration at the back end. In other words, "an inventor acquires an undue advantage over the public by delaying to take out a patent, inasmuch as he thereby preserves the monopoly to himself for a longer period than is allowed by the policy of the law." *Elizabeth v. Pavement Co.*, 97 U.S. 126, 137 (1878); *see also Pennock v. Dialogue*, 27 U.S. (2 Pet.) 1, 19 (1829) (noting that late filing of patent application can impermissibly "exclude the public from any farther use than what should be derived under it during" the

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ticalities and Potential Pitfalls When Using Provisional Patent Applications, 22 AIPLA Q.J. 259, 276 (1994) ("[I]t may be desirable to file a plurality of provisional applications in a period of a year . . . .").

[10] *Cf.* Van Horn, *supra* note 9, at 269 (describing another application of selective abandonment of provisional patent applications).

patent term). To prevent an inventor from acquiring this undue advantage, the on-sale bar forces the inventor to file within one year of the first offer for sale, thereby "confining the duration of the monopoly to the statutory term." *Pfaff v. Wells Elecs., Inc.*, 525 U.S. 55, 64 (1998).

The on-sale bar also actualizes the public disclosure function of patents. The patent grant is understood to be a bargain, in consideration of which the inventor discloses the workings of the invention being patented: "The disclosure required by the Patent Act is 'the *quid pro quo* of the right to exclude.'" *J.E.M. Ag Supply, Inc. v. Pioneer Hi-Bred Int'l, Inc.*, 534 U.S. 124, 142 (2001) (quoting *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470, 484 (1974)); *accord Universal Oil Co. v. Globe Co.*, 322 U.S. 471, 484 (1944); *see also Bonito Boats, Inc. v. Thunder Craft Boats, Inc.*, 489 U.S. 141, 150 (1989) (patent system is a "carefully crafted bargain"). Certainly nothing obligates disclosure of inventions through patent filings, but the inventor who "withholds his invention from the public, comes not within the policy or objects" of the patent system and thus may not enjoy the benefits of patent protection. *Kendall v. Winsor*, 62 U.S. (21 How.) 322, 328 (1859). Section 102 implements this principle by forcing inventors to elect, within one year of first commercial use, between disclosing their inventions in patent filings or withholding them as trade secrets. *See Pennock*, 27 U.S. (2 Pet.) at 19. In the words of Judge Learned Hand, the inventor "must content himself with either secrecy, or legal monopoly." *Metallizing Eng'g Co. v. Kenyon Bearing & Auto Parts Co.*, 153 F.2d 516, 520 (2d Cir. 1946) (Learned Hand, J.).

Both the time limitation and the disclosure function of patents would be greatly undermined if nondisclosure

agreements sufficed to overcome the § 102(a)(1) on-sale bar. Imagine, for example, if Petitioner Helsinn had included its confidentiality terms in a package insert accompanying its invented drug. Helsinn could potentially have delayed filing its first patent application all the way until the first generic competitor's entry in 2011—ten years after Helsinn's initial sale to MGI and three years after FDA approval—all the while selling and profiting off of the drug. The public would bear the costs of the extended patent term and the delayed disclosure of the invention.

These public costs are not small. With regard to pharmaceuticals, for example, commentators report that "the average markup for patented drugs is nearly 400%," and "introducing generic competition can cause prices to fall to as little as 6% of the patent-protected price."[11] A month's supply of the cholesterol-lowering drug atorvastatin (Lipitor) cost about $165 while under patent, and $15 after the patent expired.[12] All these cost savings stand to be lost if inventors can extend their patents by delaying filing. Extending the patent on Lipitor, for example, would have cost Americans about $41 million *per day*.[13]

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[11] Hannah Brennan et al., *A Prescription for Excessive Drug Pricing: Leveraging Government Patent Use for Health*, 18 Yale J.L. & Tech. 275, 284–85 (2016) (citing FDA and other studies); Richard G. Frank & David S. Salkever, *Generic Entry and the Pricing of Pharmaceuticals*, 6 J. Econ. Mgmt. Strategy 75, 83–84 & tbl.2 (1997) (finding that generic drug prices drop to below 50% of the patent-based price within 3 years of patent expiration).

[12] *See* W. Nicholson Price II, *Expired Patents, Trade Secrets, and Stymied Competition*, 92 Notre Dame L. Rev. 1611, 1622 & n.67 (2017).

[13] That number is computed as follows: The U.S. Census Bureau estimates the population of Americans aged 40 and over at 147

Patent applicants should not be able, by mere invocation of a nondisclosure agreement, to evade the fundamental patent *quid pro quo* of a limited-term monopoly in exchange for timely disclosure. Yet that is the very result to be expected should this Court endorse Petitioner's theory of secret sales. That theory would undermine the basic tenets of patent law, and it cannot be correct.

D. Over-Prevalence of Nondisclosure Agreements Will Impair Critical Research into Product Security, Safety, and Improvement

Besides subverting the basic aims of the patent system, a proliferation of nondisclosure agreements resulting from Petitioner's interpretation of § 102 would have the unintended consequence of undermining the practice of product research, a practice that confers important and substantial benefits upon the public welfare. Avoiding that unintended consequence is yet another reason not to impose Petitioner's desired limitation on § 102.

The practice of studying how a machine or product works is a time-honored tradition and a "fair and honest means" that works to the benefit of the public in multiple ways. *Kewanee Oil Co. v. Bicron Corp.*, 416 U.S. 470,

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million in 2012. The CDC reports that 27.9% of that population used a cholesterol-lowering medication, and 20.2% of them used atorvastatin. *See* Qiuping Gu et al., Nat'l Ctr. for Health Statistics, Ctrs. for Disease Control & Prevention, *NCHS Data Brief No. 177, Prescription Cholesterol-Lowering Medication Use in Adults Aged 40 and Over: United States, 2003–2012*, at 1–2 (Dec. 2014), *available online*. Thus, 8.29 million Americans used atorvastatin in 2012. The difference between the on-patent and off-patent daily cost is $5 ($150 per month divided by 30 days), leading to a nationwide cost of $41.45 million per day.

476 (1974). Firms study their competitors' products to produce competing alternatives or to improve their current lines. This activity enriches the marketplace with competitive options and indeed "often leads to significant advances in technology." *Bonito Boats*, 489 U.S. at 160.

More importantly, product research is often the first step in protecting the public from serious harms or flaws in consumer products.[14] Computer scientists have reverse-engineered voting machines to demonstrate how those machines can be tricked into mistabulating votes during an election.[15] Analysis of computerized home automation devices such as thermostats has revealed that some of them mistakenly broadcast private information on the public Internet,[16] and some may be attacked and commandeered to spy on their owners.[17] Product research also enables consumers to engage in repairs. Online websites often disassemble products to provide step-by-step instructions for repairing everything from mobile phones to toothbrushes.[18]

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[14] *See generally* Trevor A. Thompson, *Terrorizing the Technological Neighborhood Watch: The Alienation and Deterrence of the "White Hats" Under the CFAA*, 36 Fla. St. U. L. Rev. 537, 543–60 (2009) (describing practices of software product vulnerability researchers).

[15] *See* Stephen Checkoway et al., *Can DREs Provide Long-Lasting Security? The Case of Return-Oriented Programming and the AVC Advantage*, Proc. 2009 Electronic Voting Tech. Workshop/Workshop on Trustworthy Elections, Aug. 10–11, 2009, at 3, *available online*.

[16] *See* Nick Feamster, *Who Will Secure the Internet of Things?*, Freedom to Tinker (Jan. 19, 2016), *available online*.

[17] *See* Grant Hernandez et al., *Smart Nest Thermostat: A Smart Spy in Your Home*, Proc. Black Hat USA 2014, Aug. 2–7, 2014, at 7, *available online*.

[18] *See iPhone X Teardown*, iFixit (Nov. 3, 2017), *available online*; Igor Orlovich, *Philips Sonicare HX6710 Teardown and Repair*, KuzyaTech (Nov. 3, 2013), *available online*.

Manufacturers are predictably unenthusiastic about researchers studying products either for competitive purposes or to expose flaws, and they frequently seek to preclude researchers from disclosing the results of their studies. One study found that 22% of computer security researchers had received legal threats arising out of their work.[19] Oracle's Chief Security Officer once condemned security research based on reverse-engineering, observing that Oracle's software license agreement prohibited it.[20] When Professor Ed Felten and student J. Alex Halderman discovered that music discs sold by Sony BMG were intentionally installing malicious software on consumer computers, they feared that Sony BMG might sue them for their research and so withheld their discovery for weeks—leaving millions of computers insecure and vulnerable to cyberattack.[21]

Should this Court approve Petitioner's claim that secrecy agreements avoid the on-sale bar and thus potentially allow inventors to delay filing of patent applications, the proliferation of secrecy agreements that will likely follow will add yet more tools that will help companies to suppress product research. This unintended negative side effect further militates against interpreting the on-sale bar of § 102 as Petitioner does.

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[19] Alexander Gamero-Garrido et al., *Quantifying the Pressure of Legal Risks on Third-party Vulnerability Research*, 2017 Proc. ACM SIGSAC Conf. on Computer & Comm. Security 1501, 1511.

[20] *See* Dennis Fisher, *Oracle CSO: You "Must Not Reverse Engineer Our Code"*, Threatpost (Aug. 11, 2015), *available online*. An anti-reverse-engineering agreement is sufficiently similar to a nondisclosure agreement for purposes of the analysis here, because both effectively prohibit revealing of the workings of an invention.

[21] *See* Deirdre K. Mulligan & Aaron K. Perzanowski, *The Magnificence of the Disaster: Reconstructing the Sony BMG Rootkit Incident*, 22 Berkeley Tech. L.J. 1157, 1198–99 (2007).

II. Principles of Property Rights Counsel Against Limiting the Scope of the On-Sale Bar, Contrary to the Views of Petitioner and the Government

Section 102 is best interpreted to encompass any sale or offer for sale, regardless of contractual conditions, the nature of the buyer, and whether the clause "or otherwise available to the public" modifies "on sale." This is because a buyer of an item has the basic property right to resell it. An inventor who puts an invention on sale, then, must embrace the fact that anyone may acquire the invention through resale, rendering the invention available to the public. Petitioner and the government both assume that inventors may constrain the universe of possible buyers, so their interpretations of § 102 are contrary to the freedom to alienate property.

Neither of their interpretations should be accepted for two reasons. First, the on-sale bar has always been consistent with property rights, and to render patent law inconsistent with centuries of experience would be inadvisable. Second, this Court has determined in a related context that patent law should not intrude upon the domain of property law; that determination should hold equally true in the context of § 102.

A. On-Sale Property Is Open to Resale and Therefore Inherently Available to the Public

1. A sale of property is a complete transfer of legal interest in the property from seller to buyer. One who places property "on sale," then, necessarily expresses a willingness to place the property irrevocably in the hands of the public.

Under traditional property law, a sale of property has at least two automatic effects. First, the seller loses all right to repossess the property—personal property must generally be held in fee simple, and servitudes are not permitted. *See* Thomas W. Merrill & Henry E. Smith, *Optimal Standardization in the Law of Property: The Numerus Clausus Principle*, 110 Yale L.J. 1, 17–18 (2000).[22] Second, the buyer has the unrestricted right to resell the purchased property, a right "tracing its lineage back to the 'common law's refusal to permit restraints on the alienation of chattels.'" *Impression Prods., Inc. v. Lexmark Int'l, Inc.*, 137 S. Ct. 1523, 1532 (2017) (quoting *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 538 (2013)). The item may be resold, transferred, or used in any other way desired regardless of the wishes of the original seller, an incident of the principle that property is owned "in total exclusion of the right of any other individual in the universe."[23]

Accordingly, a sale of property is inherently a public act. The item sold enters the public stream of commerce, such that anyone may acquire it at the right price. Certainly a seller may enter a private contract with a buyer in an effort to constrain the buyer's resale or disclosure of the item, and may recover money damages for a violation. But if the buyer further sells the item downstream, the seller has no recourse to recover control over the item.[24]

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[22] It is undisputed that title was transferred in fee simple in this case; it should be left to future courts to decide the treatment of more exotic transfers, such as life estates or sales subject to security interests.

[23] 2 William Blackstone, *Commentaries on the Laws of England* *2 (1765).

[24] *See* Hal M. Smith, *Title and the Right to Possession Under the Uniform Commercial Code*, 10 B.C. Indus. & Com. L. Rev. 39, 47

And a downstream buyer can overcome any contractual limitation on the original buyer by offering a price sufficient to overcome the cost of breach. So even if an inventor is willing to sell directly only to one specific buyer, the sale of the invention necessarily makes that invention available to the public.

An unconsummated offer for sale equally renders an invention available to the public. Inventors who place their inventions "on sale" must accept the consequence that their sold inventions, being property, will be exposed to the public market by operation of property law. Because an offer for sale is one that a third party buyer can accept at the snap of a finger, *see* U.C.C. § 2-206 (2002), an inventor would not make an offer for sale without being willing to accept the consequences of acceptance and a completed sale. Should an inventor be unwilling to accept those consequences, the inventor has a host of alternate forms of transactions—selling marketing rights or patent licenses, for example[25]—that do not carry the public consequences of a sale. An offer to sell, even if never accepted, evinces the inventor's willingness to cede control over the invention, to release it to the whims of the open market, and thus to make the invention available to the public.

2. Neither Petitioner Helsinn's nor the government's interpretation of § 102 is consistent with the above ordinary operation of property rights. Helsinn argues (at 14) that the presence of a confidentiality agreement attached to sale of an invention means that the invention

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(1968) ("Once the original buyer obtains title, he has the power by transfer to a subsequent good faith purchaser to cut off the seller's reclamation right.").

[25] *See In re Kollar*, 286 F.3d 1326, 1334 (Fed. Cir. 2002) (discussed *infra* p. 22).

was not "available to the public." But the buyer, MGI Pharma, was free to resell what it had bought; Helsinn may have had a contractual remedy but no way to rewind the resale.[26] Helsinn's interpretation of "on sale" thus gives contract law improper primacy over property law and supposes that the confidentiality contract still gave Helsinn "control" over property it had sold.

A similar flaw is present in the government's theory (at 26) that only sales to "expected ultimate customers" qualify for the on-sale bar. MGI was free to resell to said "ultimate customers" at its pleasure, again facing at most damages for breach. The government's theory only makes sense if Helsinn could restrain MGI from alienating its property to those ultimate customers—something that traditional property law does not allow.

Fundamentally, both Petitioner and the government presume that an inventor who sells an invention can intend for the invention to reach the hands of some buyers but not others. That presumption is irreconcilable with the right to alienate property.

B. The On-Sale Bar Has Been and Should Be Interpreted as Consistent with Free Alienability of Property

Certainly Congress is permitted to draft § 102 in a way that clashes with traditional property rights, but there are several reasons to believe it did not. Foremost among these is that property law is a well-seasoned jurisprudence that ought not to be rewritten in a patent-exceptional manner.

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[26] It is irrelevant that Helsinn had not delivered the invention to MGI; one can resell title to purchased property before delivery.

The right to alienate property is among the most ancient rules in the already-ancient law of property. Rules against sellers' dead-hand control over alienated property trace back at least to the English 1290 statute *Quia Emptores*, which permitted unconditional assignment of land but prohibited a partial alienation practice called "subinfeudation."[27] Sir Edward Coke in 1628 famously described restraints on alienation as "against Trade and Traffique, and bargaining and contracting between man and man." 1 Edward Coke, *Institutes of the Lawes of England* § 360, at 223b (1628), *available online*; *see also id.* § 334, at 205b ("Conditions [on alienated property] bee not favoured . . . ."). Numerous American commentators have agreed,[28] and courts have uniformly followed the rule against restraints on alienation.[29] This Court recently described the principle as one of "impeccable historical pedigree." *Impression Prods.*, 137 S. Ct. at 1532 (quoting *Kirtsaeng v. John Wiley & Sons, Inc.*, 568 U.S. 519, 538 (2013)).

The on-sale bar has long adhered to these basic notions of property ownership, defining the transfer of alienable title to the invention as the critical date when the bar begins to run. Courts have construed "on sale"

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[27] *See* Quia Emptores, 1290, 18 Edw. 1, c. 1 (Eng.); Ronald B. Brown, *The Phenomenon of Substitution and the Statute Quia Emptores*, 46 St. Louis U. L.J. 699, 708–11 (2002) (explaining subinfeudation as an alienation of property in which the seller continued to demand feudal duties from the purchaser).

[28] *See, e.g.*, 4 James Kent, *Commentaries on American Law* *129, 131 (4th ed. 1840), *available online*; John Chipman Gray, *Restraints on the Alienation of Property* § 259, at 244 (2d ed. 1895), *available online*.

[29] *See* Richard E. Manning, *The Development of Restraints on Alienation Since Gray*, 48 Harv. L. Rev. 373, 403 & nn.127–128 (1935) (citing cases).

under § 102 with respect to the Uniform Commercial Code, which defines "sale" as "the passing of title from the seller to the buyer for a price." U.C.C. § 2-106 (2002); *see Meds. Co. v. Hospira, Inc.*, 827 F.3d 1363, 1373 (Fed. Cir. 2016) (en banc) (citing *Group One, Ltd. v. Hallmark Cards, Inc.*, 254 F.3d 1041, 1047 (Fed. Cir. 2001)). Based on this definition, the Federal Circuit has held that a sale under § 102 is an agreement "to give and to pass rights of property for consideration," and after property is sold, the buyer "normally owns it outright." *Meds. Co.*, 827 F.3d at 173 (quoting *Trading Techs. Int'l, Inc. v. eSpeed, Inc.*, 595 F.3d 1340, 1361 (Fed. Cir. 2010)); *id.* at 1374 (quoting *Minton v. Nat'l Ass'n of Sec. Dealers, Inc.*, 336 F.3d 1373, 1378 (Fed. Cir. 2003)); *see also In re Caveney*, 761 F.2d 671, 676 (Fed. Cir. 1985) ("It is well settled that a sale is a contract between parties to give and to pass rights of property . . . .") (citing 77 C.J.S. *Sales* § 1 (1952)).

The extensive reach of the on-sale bar confirms § 102's relation to property alienability. Sales of products where the nature of the invention is hidden or not discernible still trigger the on-sale bar because the relevant event is not the buyer's knowledge of the invention but rather the seller's giving up control over the invention to another; the bar applies "regardless of how little the public may have learned about the invention." *Metallizing*, 153 F.2d at 520;[30] *see Egbert v. Lippmann*, 104 U.S. 333, 336 (1881). Similarly, sales by third parties other than the inventor also start the on-sale bar clock, *see Evans Cooling Sys.*,

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[30] Though *Metallizing* dealt with use rather than sale, its "forfeiture" principle has been applied to the on-sale bar. *See, e.g.*, *D.L. Auld Co. v. Chroma Graphics Corp.*, 714 F.2d 1144, 1147 (Fed. Cir. 1983).

Inc. v. Gen. Motors Corp., 125 F.3d 1448, 1454 (Fed. Cir. 1997); *Abbott Labs. v. Geneva Pharm., Inc.*, 182 F.3d 1315, 1318 (Fed. Cir. 1999); *Caveney*, 761 F.2d at 677, as third-party sales equally place the invention on the open market.

Notably, too, the public nature of property sales explains decisions holding the on-sale bar *not* applicable. In *Elizabeth*, an inventor's experimental use of a new type of pavement was held not to affect his patent rights because, among other things, the inventor "did not let [the invention] go beyond his control" and "kept it under his own eyes." 97 U.S. at 136. *In re Kollar* explained that licensing of patent rights or manufacturing rights does not constitute a sale under § 102, *see* 286 F.3d 1326, 1334 (Fed. Cir. 2002); this is justifiable because a license, unlike sold property, is not further alienable to others. *See Troy Iron & Nail Factory v. Corning*, 55 U.S. (14 How.) 193, 216 (1853); *Cincom Sys., Inc. v. Novelis Corp.*, 581 F.3d 431, 436 (6th Cir. 2009) (noting "special rule" of non-assignability of patent licenses). That an inventor's retention of control does not invoke the on-sale bar indicates that an inventor's relinquishment of control—a sale—is the hallmark of invoking the bar.

It seems unlikely that Congress would intend to upend the time-honored rules of property law despite decades of consistency. It would furthermore be imprudent to ignore centuries of jurisprudence for the sole benefit of certain inventors. History thus teaches that the proper understanding of the on-sale bar of § 102 is to treat the act of placing an invention on sale as an inherently public act.

C. The On-Sale Bar Should Not Intrude upon the Statutory Domain of Property Law

A patent-exceptional notion of property sales would also contradict the logic of *Impression Products*, that the domain of patent law does not extend to redefining commercial sales.

The question in *Impression Products* was whether a patent owner could use a so-called "conditional sale" in order to prevent purchasers of inventions from engaging in resale or other uses of their purchased property. *See* 137 S. Ct. at 1531. In answering this question in the negative, the Court explained that the sale of property "marks the point where patent rights yield to the common law principle against restraints on alienation." *Id.* at 1526. The traditional property right "to use, sell, or import an item exists independently of the Patent Act." *Id.* at 1534. Any residual rights over the sold property were "a matter of the contracts with [the] purchasers, not the patent law." *Id.* at 1533. Once a sale had occurred, standard property law took effect, and it was no longer the place of patent law to interfere.

Certainly *Impression Products* dealt with the exhaustion doctrine and not the on-sale bar, but its treatment of the relationship between patent law and property can and should be viewed more broadly. The driving proposition, that patent law should not interfere with the statutory domain of commercial and property law, has been long appreciated in legal scholarship. *See* John F. Duffy & Richard Hynes, *Statutory Domain and the Commercial Law of Intellectual Property*, 102 Va. L. Rev. 1, 7–9 (2016). As then-Professor Easterbrook proposed, "unless the statute plainly hands courts the power to

create and revise a form of common law"—§ 102 obviously does not—"the matter in question [is] outside the statute's domain," and courts ought to look "to whatever other sources of law might be applicable." Frank H. Easterbrook, *Statutes' Domains*, 50 U. Chi. L. Rev. 533, 544 (1983). Insofar as *Impression Products* concluded that the exhaustion doctrine of patent law should not redefine common law rights of property ownership, the on-sale bar should not redefine property rights either.

Intellectual property is important, of course, but in the end it cannot compare to the importance of traditional, tangible, physical property. In deciding how to interpret the on-sale bar under § 102, it makes the most sense for patent law to follow property law, not the other way around.

CONCLUSION

For the foregoing reasons, the decision of the Court of Appeals should be affirmed.

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October 2018